

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE REPLACEMENT OF THE SIGN FOR THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF US 1 AND MD 147 IN HARFORD COUNTY.

INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE. THERE IS AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR BOTH THE NORTH AND SOUTHBOUND MOVEMENTS OF US 1. THE SIDE STREETS OPERATE IN A SPLIT PHASE.

CONTROLLER REQUIREMENTS

AN EIGHT PHASE, FULL-TRAFFIC-ACTUATED, SOLID STATE DIGITAL CONTROLLER WITH ONE (1) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER, AND INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

PROJECT CONTACTS

THE CONTACT PERSON FOR SHA ARE AS FOLLOWS:

MS. ERIN KUHN, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: 410-229-2381
MR. DONALD SCHAEFFER, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 229-2421
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MR. MICHAEL PASOARIELLO, UTILITY ENGINEER
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MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630
MR. EDWARD RODENHIZER, SUPERVISOR, SIGNAL OPERATIONS
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EQUIPMENT LIST

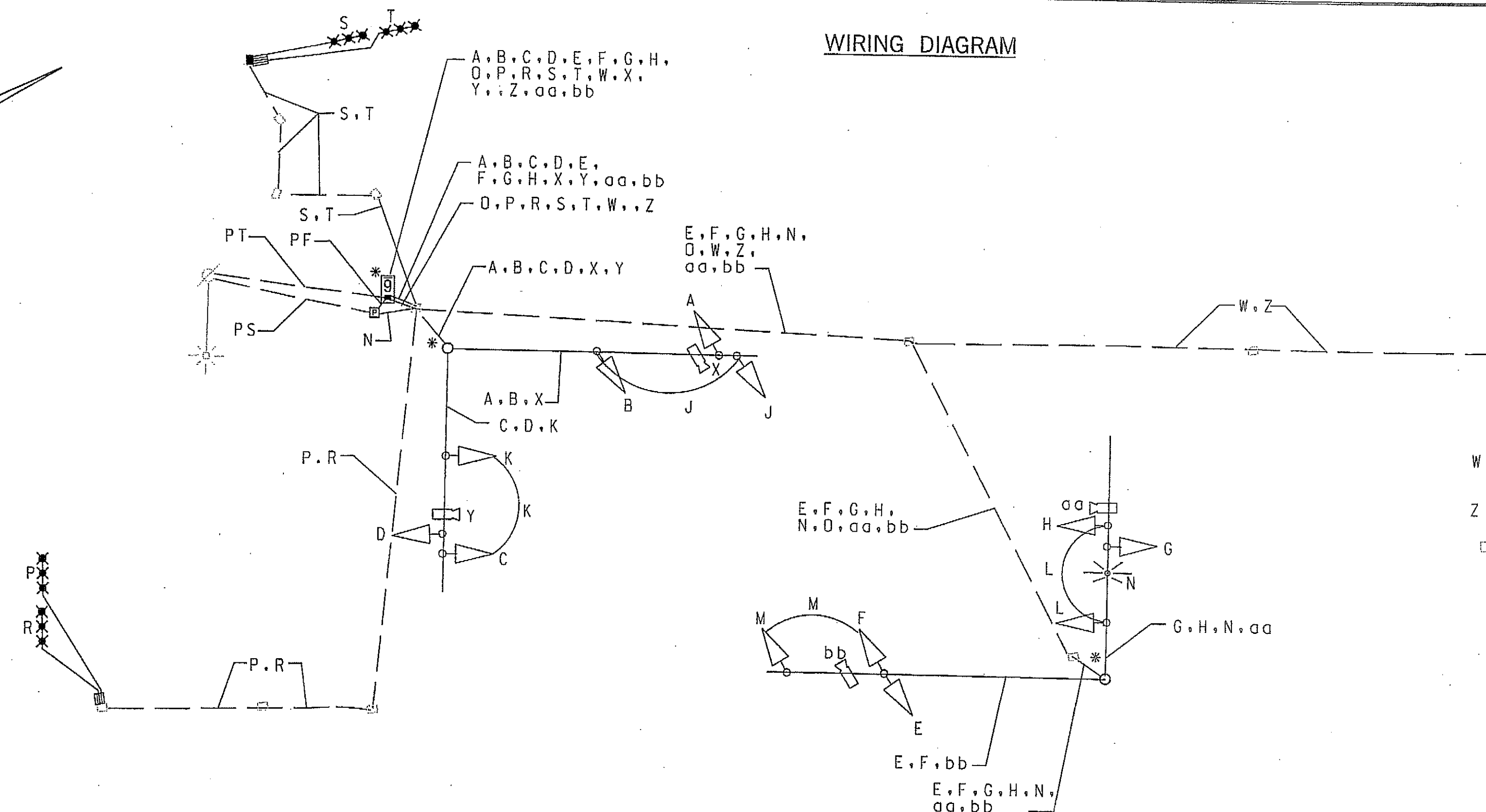
A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION

QUANTITY	UNIT	DESCRIPTION
1	EA	R3-5 (L) (30" X 36")
1	EA	ADJUST VIDEO DETECTION CAMERA
1	EA	RAISE FRAME AND COVER ON EXISTING HANDHOLE
1	EA	REMOVE EXISTING SIGN

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	
PHASE 1 & 5	R/G	R/G	R	R/G	R/G	R	R	R	R	R	R	R	↑
1 & 5 CHANGE TO PHASE 1 & 6 OR PHASE 2 & 5 OR PHASE 2 & 6													↓
PHASE 1 & 6	G/G	G/G	G	R	R	R	R	R	R	R	R	R	↑
1 CHANGE	Y/Y	Y/Y	Y	R	R	R	R	R	R	R	R	R	↓
PHASE 2 & 5	R	R	R	G/G	G/G	G	R	R	R	R	R	R	↑
5 CHANGE	R	R	R	Y/Y	Y/Y	Y	R	R	R	R	R	R	↓
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R	↑
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	↓
PHASE 3	R	R	R	R	R	R	G/G	G/G	G	R	R	R	↑
3 CHANGE	R	R	R	R	R	R	Y	Y	Y	R	R	R	↓
PHASE 4	R	R	R	R	R	R	R	R	R	G/G	G/G	G	↑
4 CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	Y	↓
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	↑

WIRING DIAGRAM



EXISTING WIRING KEY

- A.B.C.D.E.F.G.H - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- J.K.L.M - 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- N - 2 CONDUCTOR ELECTRICAL CABLE TYPE T/C (NO. 12 AWG)
- O - STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
- P.R.S.T - MICRO-LOOP PROBE SET WITH 500 FT LEAD-IN
- W.Z - NON-INVASIVE DETECTOR WITH 500 FT LEAD-IN
- X.Y.aa.bb - VIDEO CAMERA CABLE
- PS - PROPOSED UNDERGROUND ELECTRICAL SERVICE
- PT - PROPOSED UNDERGROUND TELEPHONE SERVICE
- PF - PROPOSED POWER FEED 3 WIRE, 1 CONDUCTOR (NO. 4 AWG)
- * - 3/4 IN. X 10 FT. GROUND ROD

MD-AMD Tracking No.: 07APHA01630X

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
TRAFFIC SIGNAL PLAN
US 1 (BELAIR RD) AND
HARFORD ROAD (MD 147)

SCALE NA DATE 06-21-2012 CONTRACT NO. BW996MB2

DESIGNED BY FJH COUNTY HARFORD
DRAWN BY FJH LOGMILE 1200802.67
CHECKED BY T.J.M.S. NO. L365
F.A.P. NO. N/A TOD NO.

TS NO. 610 K DRAWING NO. SHEET NO. 18 OF 18

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PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE
NO. 22316, EXPIRATION DATE: 7/13/14